

**CLAIMS**

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2 Please amend the claims as follows:

3 1. A pressurizing device, comprising:

4 a fixed part;

5 an output shaft inserted in the fixed part and supported slidably in its axial  
6 direction, forming a first fluid compartment and a second fluid compartment between  
7 itself and the fixed part;

8 a first piston formed on the output shaft and dividing the first fluid compartment  
9 and the second fluid compartment and having a first connecting hole for connecting the  
10 first fluid compartment and the second fluid compartment;

11 a valve member capable of opening and closing the first connecting hole;

12 an input shaft inserted in the output shaft and supported slidably relative to and in  
13 the same axial direction as the output shaft and forming a third fluid compartment,  
14 connected to the second fluid compartment, between itself and the output shaft; and

15 a second piston formed on the input shaft and having a smaller pressurizing area  
16 than the first piston, for expanding and contracting the third fluid compartment along with  
17 reciprocating movement of the input shaft,

18 capable of selectively effecting rapid movement of the output shaft by opening  
19 the first connecting hole and coupling the input shaft to the output shaft so that relative  
20 movement of the two does not occur and effecting high thrust force pressurization of the  
21 output shaft by closing the first connecting hole and allowing relative movement of the  
22 input shaft and the output shaft by releasing the connection preventing relative movement  
23 of the input shaft and the output shaft,

24 whereby a third through hole extending in the axial direction from the second

1 fluid compartment to outside is formed in the fixed part,  
2 a rod is slidably supported in the third through hole so as to block the third  
3 through hole,  
4 the valve member is fixed to one end of the rod and a motive power source  
5 mounted outside the fixed part is connected to the other end, and  
6 the first connecting hole is opened and closed by the motive power source  
7 operating and advancing and retracting the valve member in the axial direction.  
8

1     2. A pressurizing device, comprising:

2             a fixed part;

3             an output shaft inserted in the fixed part and supported slidably in its axial

4     direction, forming a first fluid compartment and a second fluid compartment between

5     itself and the fixed part;

6             a first piston formed on the output shaft and dividing the first fluid compartment

7     and the second fluid compartment and having a first connecting hole for connecting the

8     first fluid compartment and the second fluid compartment;

9             a valve member capable of opening and closing the first connecting hole;

10            an input shaft inserted in the output shaft and supported slidably relative to and in

11   the same axial direction as the output shaft and forming a third fluid compartment,

12   connected to the second fluid compartment, between itself and the output shaft; and

13            a second piston formed on the input shaft and having a smaller pressurizing area

14   than the first piston, for expanding and contracting the third fluid compartment along with

15   reciprocating movement of the input shaft,

16            capable of selectively effecting rapid movement of the output shaft by opening

17   the first connecting hole and coupling the input shaft to the output shaft so that relative

18   movement of the two does not occur and effecting high thrust force pressurization of the

19   output shaft by closing the first connecting hole and allowing relative movement of the

20   input shaft and the output shaft by releasing the connection preventing relative movement

21   of the input shaft and the output shaft,

22            characterized in that a third through hole extending in the axial direction from

23   the second fluid compartment to outside is formed in the fixed part,

24            a rod is slidably supported in the third through hole so as to block the third

1 through hole,

2 the valve member is fixed to one of the rod and a motive power source mounted  
3 on the output shaft is connected to the other end, and

4 the first connecting hole is opened and closed by the motive power source  
5 operating and advancing and retracting the valve member in the axial direction.

6 3. A pressurizing device, comprising:

7 a fixed part having a hollow tubular shape with a first through hole and a second  
8 through hole formed in opposite ends of it in a tube axis direction;

9 an output shaft having a hollow tubular shape slidably supported by the first  
10 through hole and the second through hole and forming a first fluid compartment and a  
11 second fluid compartment between itself and the fixed part;

12 a first piston formed integrally with the output shaft and dividing the first fluid  
13 compartment and the second fluid compartment and having a first connecting hole for  
14 connecting the first fluid compartment and the second fluid compartment;

15 a valve member capable of opening and closing the first connecting hole;

16 an input shaft, slidably supported by the output shaft and forming a third fluid  
17 compartment, connected to the second fluid compartment, between itself and the output  
18 shaft;

19 a second piston, formed integrally with the input shaft and having a smaller  
20 pressurizing area than the first piston, for expanding and contracting the third fluid  
21 compartment along with reciprocating movement of the input shaft; and

22 a pressure-absorbing mechanism relieving the fluid pressure inside the first  
23 fluid compartment when the first fluid compartment undergoes high thrust force  
24 pressurization by the first piston,

1           and capable of selectively effecting rapid movement of the output shaft by  
2   opening the first connecting hole and moving the input shaft with the input shaft and the  
3   output shaft in a directly coupled state and effecting high thrust force pressurization of the  
4   output shaft by closing the first connecting hole and moving the input shaft with the input  
5   shaft and the output shaft in a fluidly coupled state,

6           a third through hole extending in the tube axis direction from the second fluid  
7   compartment to outside is formed passing through the fixed part,

8           a rod is slidably supported in the third through hole so as to block the third  
9   through hole,

10          the valve member is fixed to one of the rod and an advancing and retracting  
11   mechanism fixed to the output shaft is connected to the other end, and

12          the first connecting hole is opened and closed by the advancing and retracting  
13   mechanism operating and advancing and retracting the valve member in the tube axis  
14   direction.

15          4. The pressurizing device according to claim 3, wherein the pressure-absorbing  
16   mechanism has a chamber whose volume varies in correspondence with its internal  
17   pressure connected to the first fluid compartment, and this chamber is mounted outside  
18   the fixed part.

19          5. The pressurizing device according to claim 4, wherein said chamber  
20   comprises a hollow tubular chamber case, a pressure-absorbing piston slidably supported  
21   inside the chamber case, and a measuring device for detecting a sliding distance of the  
22   pressure-absorbing piston.

23          6. The pressurizing device according to claim 5, wherein the pressurizing area of  
24   the pressure-absorbing piston is the same as the pressurizing area of the first piston.

1           7. A pressurizing device according to claim 1, wherein said rod is exposed so  
2 that its operating state is visible from outside.

3           8. A pressurizing device, comprising:

4           a fixed part;

5           an output shaft supported slidably in its axial direction by the fixed part;

6           an input shaft supported by the output shaft movably relative to and in the same  
7 axial direction as the output shaft, capable of moving rapidly in the axial direction and  
8 capable of being coupled to the output shaft so that relative movement does not occur; and

9           a fluid pressure mechanism, provided between the output shaft and the input  
10 shaft, for, when the input shaft and the output shaft move relatively, increasing a thrust  
11 force of the input shaft by means of Pascal's principle and transmitting it to the output  
12 shaft,

13           capable of effecting rapid movement of the output shaft by coupling the input  
14 shaft to the output shaft so that relative movement does not occur and moving and  
15 effecting high thrust force pressurization of the output shaft by releasing said coupling  
16 and allowing the input shaft to move relative to the output shaft,

17           a motive power source of a switching mechanism for switching from the rapid  
18 movement to the high thrust force pressurization is mounted outside the fixed part.

19           9. The pressurizing device according to claim 8, wherein the motive power  
20 source is mounted on the output shaft.